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ABSTRACT

This slide script, part of a series of slide scripts designed for use in vocational agriculture classes, deals with commercially important woody ornamental landscape plants. Included in the script are narrations for use with a total of 253 slides illustrating 92 different plants. Several slides are used to illustrate each plant: besides a view of the form of each plant, close-ups of the flower, fruit, or foliage are provided. Plants are grouped by type, and, in each group, plants are treated alphabetically by genus. The categories are deciduous trees, deciduous shrubs, ground covers, broadleaf evergreens, and needled evergreens. At the end of the script are two indexes: one for the scientific name and family of each plant and the other for the common names. The introduction to the script also includes suggestions for its use and recommended additional learning activities. (MN)

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AGDEX 271/30

SELECTED LANDSCAPE PLANTS

Slide Script

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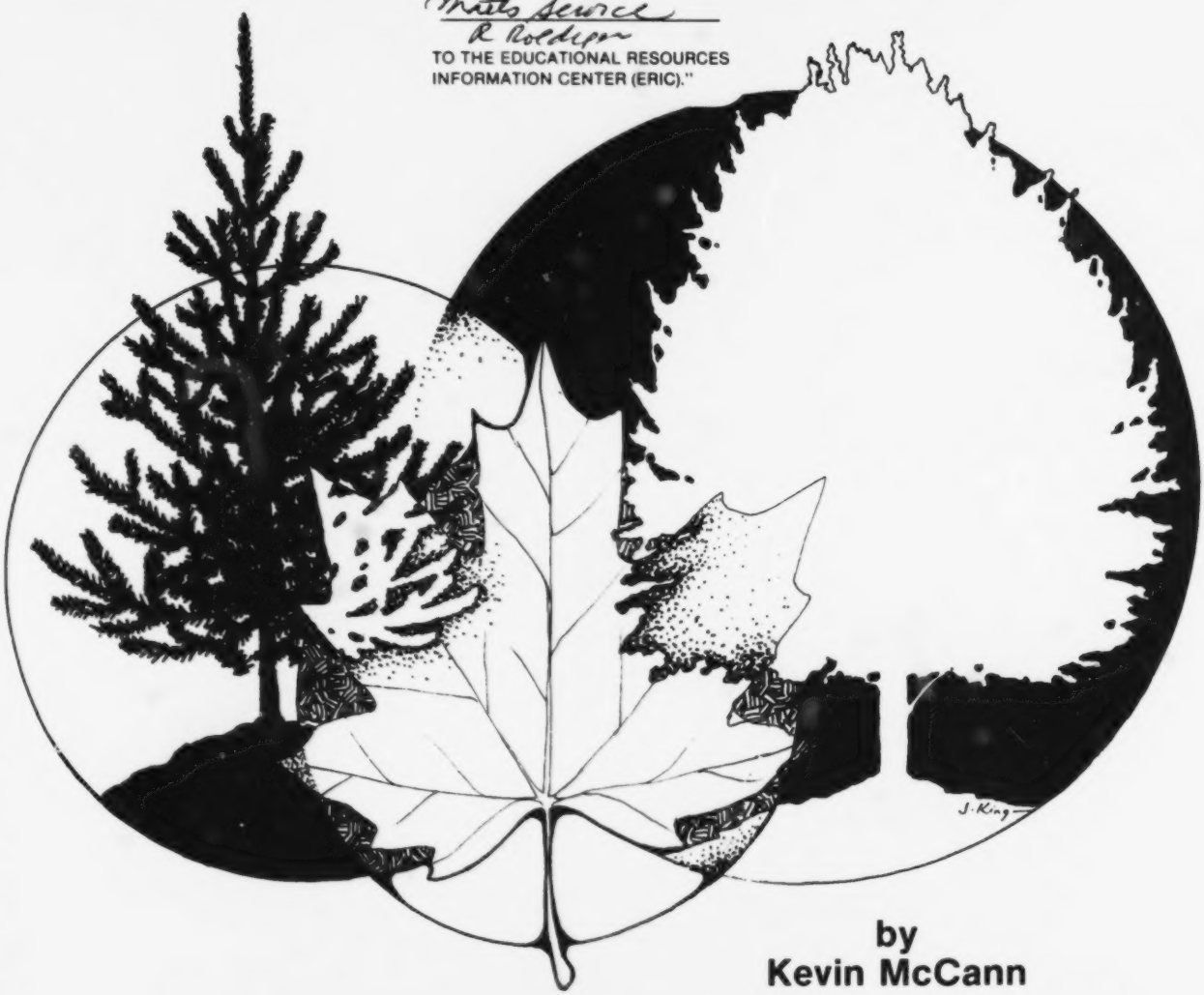

by
Kevin McCann

CE 045 075

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ACKNOWLEDGMENTS

Kevin McCann is a teacher of vocational horticulture at the Agricultural Education Center, Toledo Public Schools. Mr. McCann has a B.S. in horticulture from Michigan State University and an M.S. in Agricultural Education from The Ohio State University. He has worked extensively with woody ornamentals, and is a member of numerous professional organizations in agricultural education.

Project director for this slide series was A.W. Welch. Editing and layout were done by Muriel King. Phototypesetting was by Jacqueline A. Stuts. The slide script cover was designed by Jerry King.

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1984

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FOREWORD

A major objective of *Selected Landscape Plants*, slide set and script, is to aid in the study and identification of commercially important woody ornamentals. The descriptions of the plants in this script are based on information gathered in the United States Department of Agriculture's hardiness zone 5. In this zone the low minimum temperature range is from -20° to -10° F. Major cities included in this zone are Chicago, Detroit, Toledo, and Cleveland. Flowering and fruiting times may differ in other hardiness zones.

Those involved in growing and selling woody ornamentals should be able to identify the plants, help customers select plants for specific situations, and provide cultural tips as well. Those who maintain woody ornamentals in the landscape must also be able to identify the plant and its cultural requirements.

Selected Landscape Plants contains slides of 92 different plants. Several slides are used to illustrate each ornamental. Besides a view of the form of each plant, there are usually included close-ups of the flower, fruit, and foliage. Common varieties and cultivars are also discussed. The plants are grouped by type of plant (deciduous tree, needled evergreen, ground cover, etc.) and, in each group, treated alphabetically by genus. The narrative for the first slide of each plant includes the scientific name (genus and species), the phonetic spelling of the genus in parentheses, and the common name. A descriptive paragraph then follows.

At the end of the script are two indexes: one for the scientific name and family of each plant and the other for the common names.

SUGGESTIONS FOR USE

1. Review the slide series and script prior to presenting it. For additional information consult sources such as *Manual of Woody Landscape Plants*, by Michael Dirr, which is also available from the Ohio Agricultural Education Curriculum Materials Service.
2. Determine which plants are in common use in your area, then adapt the series to reflect your local situation.
3. Before presenting this series, make sure viewers have some knowledge of the culture and uses of woody ornamentals and of terminology related to plant growth. Then decide how much and what type of additional information your viewers need to know.
4. This series has been divided into sections based on type of plant. It is suggested that no more than one segment be presented during any one session.
5. Add your own information and comments or those of your viewers to make the series relevant to your local situation. For example, viewers may be called upon to describe how each plant might be used in the outdoor environment.

SUGGESTIONS FOR ADDITIONAL ACTIVITIES

1. Visit a local nursery to observe how woody ornamentals are grown and used. Have the nursery operator explain the practices employed.
2. Do a survey of the types of plants available locally.
3. Devise experiments comparing the adaptability of certain plants to various landscape conditions.
4. Plant woody ornamentals in the school landscape or the landscapes of local businesses. Have students care for these plants on a regular basis.

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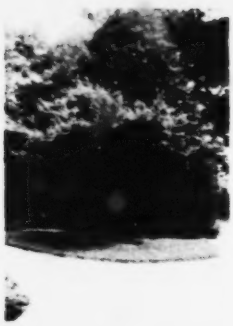
SELECTED LANDSCAPE PLANTS

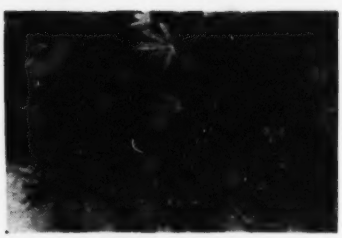
1. Title slide

2. **DECIDUOUS TREES**



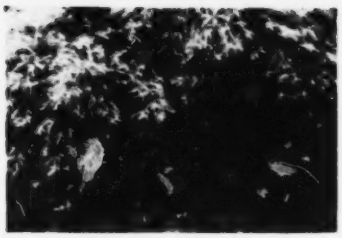
3. ***Acer palmatum*** (AY-ser) - JAPANESE MAPLE

   Japanese maple is a small, fine-textured tree growing to 20 feet in height. It has an upright form and is often difficult to establish.



4. The leaves are deciduous, opposite, simple, palmately-lobed, green to yellow-green, with double teeth.

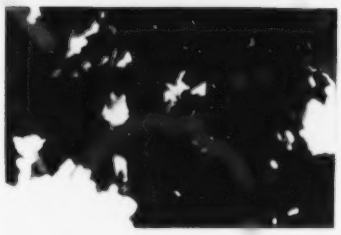
5. An attractive cultivar of Japanese maple is 'Atropurpureum'. It has red leaves throughout the growing season and is one of the most hardy cultivars.



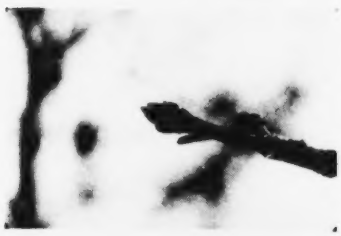
6. 'Dissectum,' another interesting cultivar, is used because of its unique lacy leaf. It does tend to be very slow-growing and less hardy.

7. ***Acer platanoides*** - NORWAY MAPLE

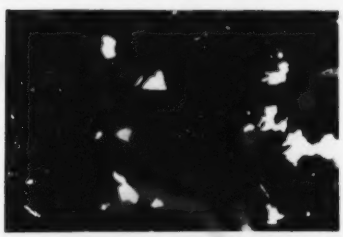
   Norway maples are large, dense, spreading-to-rounded trees. They have a rapid growth rate and are often used as shade trees. One limiting factor is their denseness. Turf and other plants have difficulty growing beneath the canopy.



8. The leaves are deciduous, green, opposite, five- to seven-lobed, toothed, 3 to 6 inches long and of equal width. A good identification characteristic is the milky sap which exudes from the petioles when broken.



9. The buds on Norway maple are ¼ inch long, rounded and blunt.



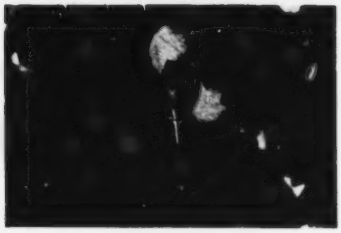
10. Another identification characteristic of Norway maple is the samaras (winged seeds) which grow in horizontal pairs. This is one way to distinguish Norway maple from sugar maple.

11. A popular cultivar is 'Crimson King'. It has dark purple-red foliage throughout the growing season.

12. ***Acer rubrum*** - RED MAPLE, SWAMP MAPLE

    Red maple is a large, spreading-to-rounded tree. It tolerates low, swampy areas and has a rapid growth rate.

13. The leaves are opposite, toothed, and 2 to 5 inches long. They are usually three-lobed, but sometimes five-lobed. The underside of the leaf is whitish.

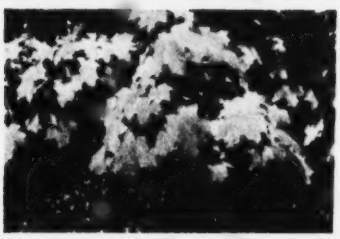


14. This slide shows the scarlet fall color of red maple — one reason for its common name. Another way to identify this plant is by the clusters of red buds.

15. ***Acer saccharum*** - SUGAR MAPLE, HARD MAPLE

    Sugar maple is a large, rounded-to-oval tree. It is known for its sap (the source of maple syrup), for its wood (which is used for furniture), and as an outstanding ornamental.

16. The leaves are opposite, five-lobed, 3 to 6 inches long, and green in color.



17. A desirable characteristic of the plant is its fall color which ranges from yellow and orange to red.

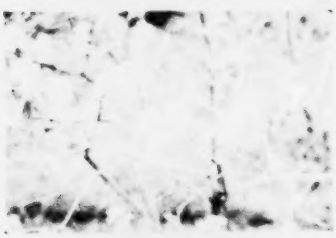
18. The buds of the sugar maple are ¼ inch long, slender and pointed.

19. Samaras are 1 to 1½ inches long and are joined together at a narrow angle.

20. ***Amelanchier* spp.** (am-el-ANK-ier) - SERVICEBERRY, JUNEBERRY

Serviceberry is used as a naturalizing or specimen tree. There are single and multi-stemmed forms which mature at heights of 30 to 40 feet, with a spread of 10 to 20 feet.

21. Leaves are alternate, simple, 1½ to 2 inches long, and toothed.



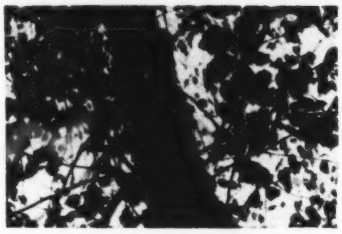
22. White flowers appear in early May. The flowers are approximately ¾ inch across and in 2- to 3-inch clusters.

23. The bark of serviceberry is smooth and gray with white lines.

24. ***Betula nigra*** (BET-yew-la) - RIVER BIRCH

River birch are pyramidal when young, spreading with maturity. Their ultimate height is approximately 100 feet. These trees will tolerate moist soils and are often seen growing on river banks, thus the common name.

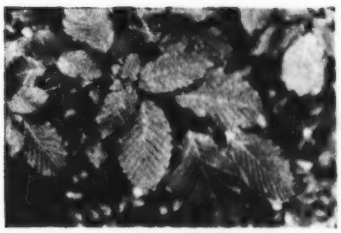
25. Leaves are alternate, 3 inches long, toothed, and whitish on the underside.



26. The easiest way to identify river birch is by its reddish-brown peeling bark.

27. ***Carpinus betulus*** (kar-PY-nus) - EUROPEAN HORNBEAM

This medium-sized tree (up to 60 feet in height) has a pyramidal form when young, rounding with age. Many times it is difficult to establish.

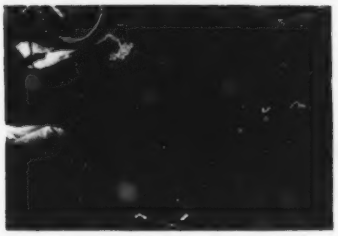


28. The leaves are alternate, 4 inches long, and double-toothed, with ten to thirteen pairs of veins.

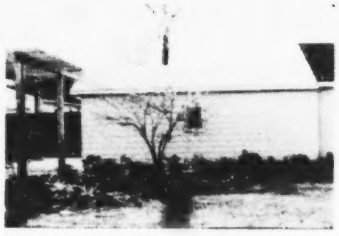
29. The bark is smooth and gray with a muscle-like texture.

30. ***Cercis canadensis*** (SER-sis) - EASTERN REDBUD, AMERICAN REDBUD

The ultimate height of redbud is 25 to 35 feet with a spread of 30 to 40 feet.



31. The leaves are alternate, 3 to 6 inches long, and heart-shaped with a pointed apex.



32. Purplish-pink flowers bloom up and down the branches in mid- to late May. These flowers are ½ inch long and are borne in clusters of four to eight. They appear before the leaves.

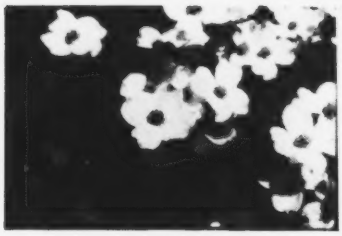
33. The fruit is a flattened brown pod, 2½ to 3½ inches long.

34. The mature bark will have a reddish-brown appearance.

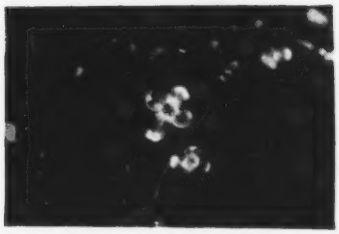
35. ***Cornus florida*** (KOR-nus) - FLOWERING DOGWOOD

Horizontal branching is one of the desirable traits of flowering dogwood. Its height is 20 to 30 feet with an equal spread. It tends to be an open tree.

36. Leaves are opposite, 3 to 6 inches long, and entire, with five to eight pairs of parallel veins.



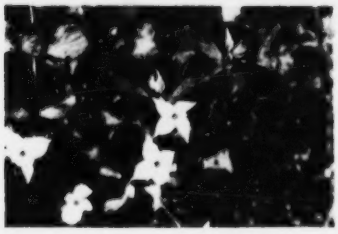
37. The true flower of flowering dogwood is inconspicuous and greenish. It is surrounded by four usually white bracts, mistaken for petals, which are the showy part of this "flower." Each bract is notched at the apex. The "flowers" appear in mid- to late May.



38. One of the more popular cultivars of flowering dogwood is 'Cherokee Chief'. It has red flower bracts instead of white.

39. ***Cornus kousa*** - KOUSA DOGWOOD

A plant similar to flowering dogwood is Kousa dogwood. It is somewhat smaller with a 15- to 20-foot height and an equal spread. When young, the form is vase-shaped, rounding with age.

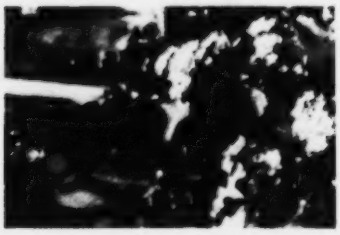


40. Another way to distinguish the Kousa from the flowering dogwood is by the flower. The Kousa flower bracts are pointed, not notched. Also it flowers in mid-June — later than the flowering dogwood. The leaves are opposite, 2 to 4 inches long, and entire with three to five parallel veins. The apex is abruptly pointed.

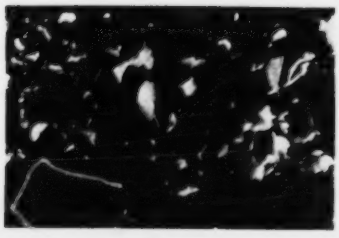
41. The fruit of Kousa dogwood is an edible, ¼-inch raspberry-like ball, maturing in late summmer to fall.

42. ***Crataegus phaenopyrum*** (krat-EE-gus) - WASHINGTON HAWTHORN

Washington hawthorn is a small tree, 25 feet in height with a 20-foot spread. It has a rapid growth rate and tolerates city conditions well.



43. Leaves are alternate, 1½ to 2 inches long, three- to five-lobed, irregularly toothed, and glossy green. The flowers appear in early June in white clusters approximately 2 inches across. A limiting factor of this plant is its thorns which are 1 to 3 inches long.



44. The fruit is a reddish-orange pome (apple), ¼ inch in diameter, maturing in the fall and lasting into winter.

45. ***Fagus sylvatica*** (FAY-gus) - EUROPEAN BEECH

European beech is a large tree, 80 feet in height with a 60-foot spread. It has a rounded form with low branches that sometimes dip down to the ground.

46. The leaves are alternate, 4 inches long, and shiny green with five to nine pairs of veins.

47. The buds are a good identification characteristic of European beech. They are brown, ¾ inch long, and pointed.

48. The bark of this plant is smooth and light gray.

49. One reason European beech is such a popular plant is its variety of cultivars. The cultivar shown here is the weeping 'Pendula' form. Other forms include cutleaf leaves, upright form, copper-colored leaves, and many others.

50. ***Fraxinus americana*** (FRAX-in-us) - WHITE ASH, AMERICAN ASH

White ash is a large tree with a mature height of 120 feet and a spread of 40 feet. It is oval when young, becoming rounded with age. This plant is another popular shade tree due to its rapid growth rate while young. It is also known for its wood, which is used to make baseball bats.

51. The leaves are opposite, pinnately compound, with five to nine leaflets. Each leaf measures 8 to 15 inches with leaflets 2 to 6 inches long. The apex on the leaflet is pointed and the leaflet margin toothed.

52. The fruits of American ash are samaras. They are single, brown, and often the source of young seedlings which can create a weed problem.

53. Horsehoe-shaped scars below the buds of American ash are a good identification characteristic. The buds themselves are reddish-brown to dark brown with lateral bud pairs alternating at right angles down the branches.

54. ***Ginkgo biloba*** (GING-ko) - GINKGO, MAIDENHAIR TREE

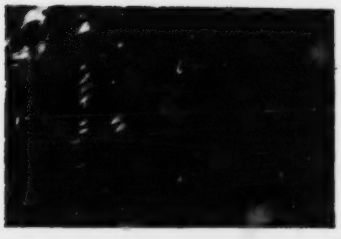
The ginkgo is considered an ancient tree and is believed to be extinct in the wild. It can reach 120 feet in height with a 40- to 50-foot spread. Ginkgos make good street trees because they tolerate city conditions well and are somewhat insect- and disease-resistant. The form is spreading and irregular. The ginkgo is dioecious, and only male trees should be planted. The females produce fruit that is a nuisance with a very unpleasant odor.

55. The leaves of the ginkgo are uniquely fan-shaped. They are 2 to 4 inches wide with a deep notched center and parallel veins.

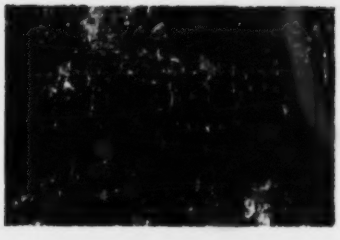
56. Spur branches up and down the branches give rise to all leaves.

57. ***Gleditsia triacanthos inermis*** (gled-IT-sia) - THORNLESS HONEYLOCUST

Thornless honeylocust is a large, rapid-growing, spreading tree. Its mature height is 120 feet with a 70-foot spread.



58. The leaves are alternate, pinnately or bipinnately compound, and 5 to 8 inches long. The base of the petiole covers the lateral buds. The leaflets are ¾ inch long and finely toothed. A filtered or light shade is created by these small leaflets.



59. The fruit of honeylocust is a 4- to 18-inch, brown twisted pod. These pods can be a litter problem. But many cultivars that do not produce fruit are also available.

60. The buds, which are sunken into the twig, make a good winter identification characteristic. This pattern often creates a zig-zag appearance of the twigs.

61. ***Liquidambar styraciflua*** (lik-wid-AM-bar) - SWEETGUM

Sweetgum has a mature height of 60 to 120 feet with a 60- to 80-foot spread. It has a pyramidal-to-rounded form and usually a very straight trunk. It is often difficult to establish because of its long tap root.

62. The leaves are alternate, 3 to 5 inches long, with five to seven palmate lobes. The lobes are pointed, giving the leaf a star-shaped appearance. It is glossy green and finely toothed.

63. A major reason for planting sweetgum is its wide range of attractive fall colors. Seen here is a red fall color. On the same tree, colors can range from deep purple to brilliant yellow (see slide #64).

64. One way to identify sweetgum is by the corky wings on the twigs. Note also the yellow fall color as previously mentioned.

65. ***Liriodendron tulipifera*** (li-ri-o-DEN-dron) - TULIP TREE

Tulip tree is a large tree reaching an ultimate height of 150 feet with a 40-foot spread. It has an oval form and a moderate growth rate. This plant is often slow to establish and is weak-wooded.

66. The leaves are alternate, 3 to 6 inches long, usually four-lobed with the top two lobes forming a notched apex. Stipules which are ½ to ¾ inch long are found at the base of the leaves.

67. The flowers are solitary, 2 inches across, and resemble a tulip. They bloom in early June in colors ranging from yellow to orange.

68. ***Magnolia soulangeana*** (mag-NO-lia) - SAUCER MAGNOLIA

This magnolia is one of the largest of the magnolia family. It can reach a height of 20 feet with a 30-foot spread.

69. The leaves are alternate, 3 to 6 inches long, and obovate with a short tapered point.

70. Magnolias are noted for their showy flowers. Saucer magnolia has large six-petaled flowers, 4 to 6 inches across. They bloom in late April to early May and range in color from white to purple-red.

71. The bark is smooth and gray with dark lenticels.

72. ***Magnolia virginiana*** - SWEETBAY MAGNOLIA

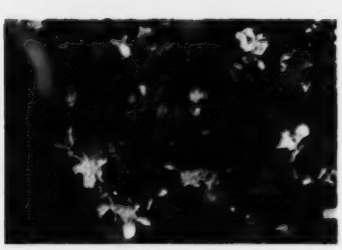
Sweetbay magnolia is a rapid-growing large shrub or small tree with an ultimate height of 15 to 25 feet and a 10- to 15-foot spread. Its one extreme drawback is that it is only marginally hardy in Zone 5.

73. The leaves are alternate, semi-evergreen, elliptical, and usually shiny above and whitish below.

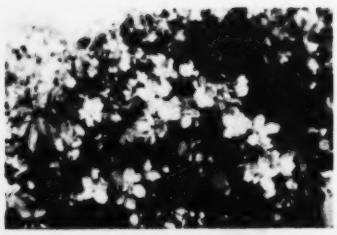
74. The large, white, cup-shaped flowers, blooming in late May to early June, are very fragrant. They are 3 to 4 inches across with nine to twelve petals.

75. ***Malus* spp.** (MAY-lus) - FLOWERING CRABAPPLE

Flowering crabapples are an extremely large and varied group known for their attractive flowering and fruiting characteristics. The form of these plants can be vase-shaped, spreading, weeping, or rounded, depending on the variety. Mature heights vary from 6 to 30 feet with an equal spread. Crabapples as a group are prone to insects and diseases. Care should be taken to select resistant varieties. Shown here is *Malus sargentii* (Sargent crab). It has an ultimate height of 6 to 8 feet and a wide, spreading form.

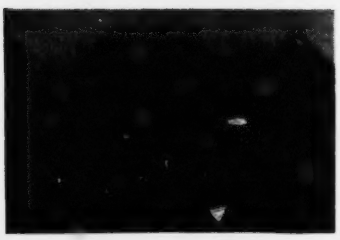


76. Crabapple leaves are alternate, 1 to 6 inches long, toothed, and often with stipules at the petiole base. The leaves of Sargent crab (seen here) are 2 to 3 inches long and sharply toothed.



77. The flowers of crabapple are usually in clusters. They bloom from early April to early May in white, pink, red, or purple colors. The flowers are usually five-petaled, unless double. Flower sizes are ½ to 2 inches across. Sargent crab flowers are 1 inch across and pink in the bud stage, turning white when fully expanded.

78. After the flowers, the fruit is the next most important reason for planting crabapples. The color of the fruit ranges through green, yellow, red and purple. Its size can be ⅜ to 2 inches in diameter. Many times the fruit is persistent, lasting well into the winter. The fruit of Sargent crab (shown here) is green, turning red when ripe. It is ⅜ inch in diameter and persistent.

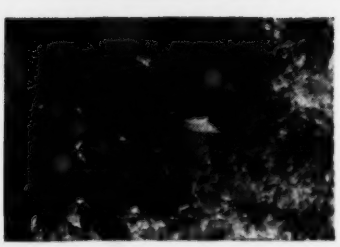


79. The plant shown here is *Malus* 'Snowdrift.' It is a somewhat larger tree, 15 to 25 feet in height, and noted for its profuse white flowers.

80. This cultivar is *Malus purpurea* 'Lemoinei.' It is a 25-foot tree and is valued for its dark red single and semi-double flowers.

81. ***Platanus*** X ***acerifolia*** (PLAT-a-nus) - LONDON PLANETREE

London planetree is a large, rapid-growing tree reaching an ultimate height of 100 feet with a 75-foot spread. It is considered one of the best choices for use as a street or parking lot tree because it tolerates such a variety of conditions. Its form is wide-spreading to rounded.



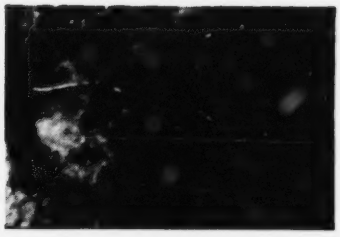
82. The leaves are alternate, 5 to 10 inches across, very coarsely toothed, and generally three-lobed. The base of the leaf is usually flat or sometimes wedge-shaped.

83. An interesting and easily identifiable characteristic of London planetree is its bark. It is exfoliating (peeling) and yellowish-green in color.

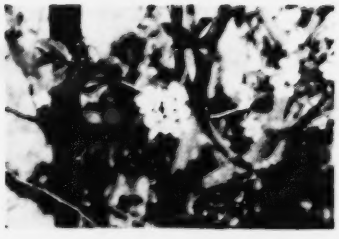
84. The fruit, 1 inch in diameter, is a brown ball-like cluster made up of individual seeds. The balls usually grow in pairs, but can be single or even triple.

85. ***Prunus cerasifera*** **'Thundercloud'** (PROO-nus) -
THUNDERCLOUD PLUM

Thundercloud plum has a mature height of 24 feet and is considered a small tree. It has a rounded form and grows quite rapidly. This plant is considered short-lived because of its insect and disease problems.



86. The leaves are oval, 1½ to 2 inches long, and are noted for remaining purple throughout the growing season.

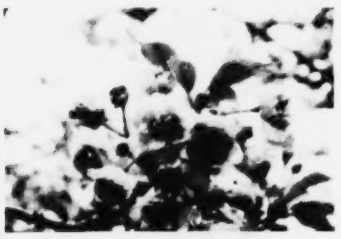


87. Light pink flowers bloom in late April, just as the leaves are appearing. The flowers are ¾ inch in diameter and short-lived.

88. ***Prunus serrulata*** - ORIENTAL CHERRY, JAPANESE FLOWERING CHERRY

This plant is a rapid-growing, broad, vase-shaped tree with a 20- to 25-foot height and spread. One drawback of Oriental cherry is its marginal hardiness in Zone 5. 'Kwanzan' is a popular cultivar that is hardy in Zone 5.

89. The leaves are alternate, 2 to 5 inches long, toothed or double-toothed with a long tapering point. At the base of the leaf on the petiole are two to four raised glands.



90. The flowers are 1 to 3 inches across, single or double, pink, and pendulous. They bloom in mid-May.

91. The bark is smooth, shiny, and reddish-brown with horizontal lenticels.

92. ***Pyrus calleryana*** (PY-rus) - CALLERY PEAR

This ornamental pear reaches a height of 30 to 50 feet in pyramidal form. It is rapid-growing.

93. The leaves are alternate, 1½ to 3 inches long, finely-toothed, and shiny green with the apex pointed. The inconspicuous fruit (also shown here) is a ½-inch pome, green to brown in color.

94. The flowers are borne in white clusters, with twelve flowers per cluster, in early May. Each cluster consists of mostly sterile flowers, each approximately ¾ inch across.

95. ***Quercus palustris*** (KWER-kus) - PIN OAK

Pin oak is probably the most commonly planted of all oaks. It has a mature height of 75 feet with a 50-foot spread. The form is pyramidal to rounded with the lower branches pointing toward the ground.

96. Pin oak leaves are alternate, 4 to 6 inches long, with five to seven lobes. The lobes have long pointed teeth with bristle tips. The leaf sinuses between lobes are very deep and C-shaped.

97. The source of pin oak's common name is these small spur branches. They resemble long pins.

98. ***Quercus rubra*** - RED OAK

Red oak is a large tree with a mature height of 80 feet and an equal spread. It has a rapid growth rate.

99. The leaves are alternate, 4 to 9 inches long, and have from seven to eleven lobes with long, pointed teeth. Iron chlorosis, which tends to be a problem with all oaks, can be observed in this picture. The symptoms are yellowing leaves with dark green veins.

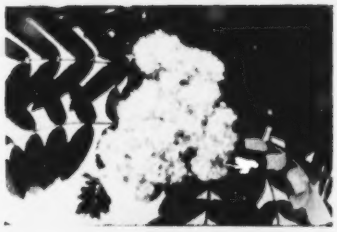
100. Red oak buds are usually clustered near the apex of the twig. They are brown and pointed with many scales.

101. A good way to identify red oak is by its bark. Smooth, light gray patches are visible as one looks up the trunk of the tree.

102. ***Sorbus aucuparia*** (SOR-bus) - EUROPEAN MOUNTAIN ASH

This popular tree is medium-sized, reaching an ultimate height of 30 to 40 feet with a 15- to 30-foot spread. It generally has a rounded form.

103. The leaves are alternate, pinnately compound with thirteen to fifteen leaflets. The leaflets are from 1 to 2½ inches long and toothed.



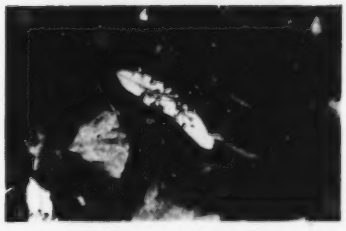
104. The flowers are creamy white and are borne in clusters measuring 2 to 4 inches across. They bloom in mid-May.

105. The fruits are berry-like, arranged in clusters, and range in color from pink and red to orange.

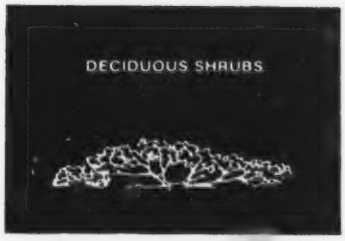
106. ***Tilia cordata*** (TIL-ia) - LITTLELEAF LINDEN

Littleleaf linden is a pyramidal-to-oval tree with a mature height of 100 feet and a spread of 45 feet.

107. The leaves are alternate, 1½ to 3 inches long, and finely-toothed with an abrupt tapered point. The base of the leaf is usually asymmetrical.



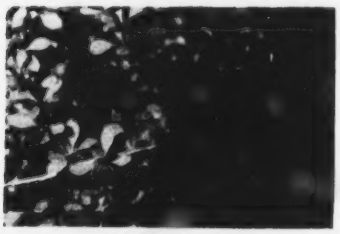
108. The fruits, which tend to be somewhat persistent, are drupes borne in clusters attached to a 2- to 3-inch, strap-like bract.



109. **DECIDUOUS SHRUBS**

110. ***Berberis thunbergii*** (BER-ber-is) - JAPANESE BARBERRY

Japanese barberry is a medium-sized shrub with an ultimate height of 5 feet and an equal spread. It will tolerate a variety of conditions from sun to shade, and from dry to moist soil. It is also quite insect- and disease-resistant.



111. The leaves are alternate, bright green, and ½ to 1¼ inches long. The leaf base is very narrow, widening to a rounded apex. Note here the solitary thorns growing in the axils of the branches. They are approximately ½ inch long.

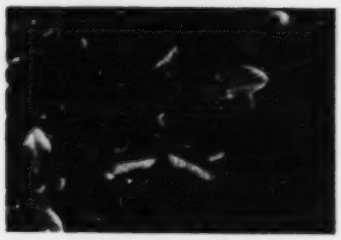
112. The fruit is an extremely persistent red berry. This slide, taken in spring, shows that the fruits have remained throughout the entire winter.

113. This particular variety of Japanese barberry is 'Atropurpurea'. It is a popular cultivar known for its purple foliage throughout the growing season.

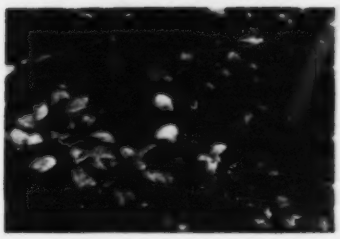
114. ***Chaenomeles* spp.** (kee-NOM-ee-lees) - JAPANESE FLOWERING QUINCE

There are many different species of quince. They are all shrubs, usually 6 to 10 feet in height, with an equal spread.

115. The flowers come in many different colors ranging from white to red. They are 2 inches across, in clusters of two to six, and flower in early May on the previous year's wood.



116. The leaves are alternate, 1½ to 3 inches long, and toothed with a pointed apex. At the leaf base is usually a pair of kidney-shaped, toothed stipules. Often thorns are present, as seen here emerging from the pair of stipules at the center of the picture.



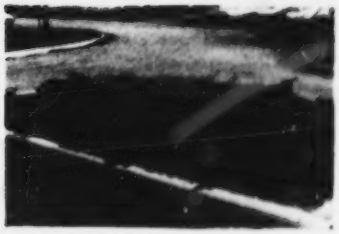
117. Although many fruitless cultivars are available, the standard species has a 2-inch yellowish-green pome. It is edible — the source of quince jelly.

118. ***Cornus sericea*** (KOR-nus) - RED OSIER DOGWOOD, RED TWIG DOGWOOD

Red twig dogwood has a mature height of 10 feet with an equal spread. It is a suckering shrub that spreads by underground stems.

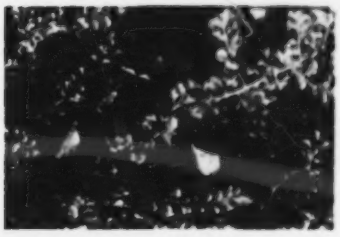
119. The white flower clusters, which bloom in May, are 2 inches across.

120. The leaves are opposite, 2 to 4 inches long, with five or six pairs of parallel veins. The fruit, which matures in late summer, is a white drupe ¼ inch in diameter. The red bark, which is the most outstanding characteristic of this plant, is quite striking in the winter.



121. ***Cotoneaster apiculatus*** (ko-to-nee-AS-ter) - CRANBERRY COTONEASTER

This 3- to 4-foot spreading shrub is rounded with arching branches. Its growth rate is moderate. Occasionally it has problems with insects (mites, aphids) and disease (fireblight).



122. The leaves of cotoneaster are alternate, ¾ inch long, and ⅜ to ⅝ inch wide with an entire leaf margin. The underside of the leaf is slightly pubescent.

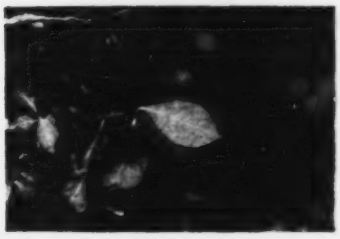
123. The red fruit, ⅜ inch in diameter, is a berry-like pome. It develops in the summer and remains through the fall.

124. ***Euonymus alata*** **'Compacta'** (yew-ON-im-us) - WINGED EUONYMUS, BURNING BUSH

The compact form of winged euonymus has a mature height of 6 feet with an equal spread. It has a round-to-spreading form.

125. The leaves are opposite, 1 to 2 inches long, toothed, and with the base and apex taper-pointed.

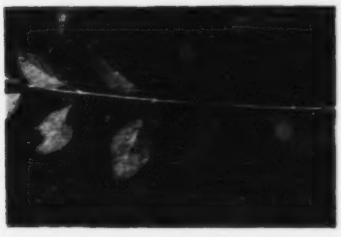
126. The corky wings on the branches are a good identification characteristic of winged euonymus. These wings can range from just a pencil line in thickness to ½ inch wide.



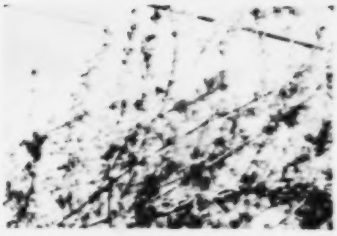
127. The fall color of burning bush — brilliant scarlet — gives the plant its name. It is the main reason for the use of this plant in the landscape.

128. ***Forsythia*** X ***intermedia*** (for-SITH-ia) - BORDER FORSYTHIA, GOLDEN BELL

This plant is an arching, upright shrub with an ultimate height of 8 feet and an equal spread. It has a rapid growth rate and can be used as a specimen bush, mass planting, or screen.



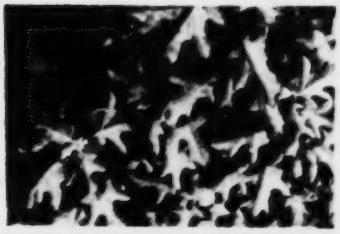
129. The leaves are opposite, 2 to 4 inches long, and toothed, with the apex pointed and the base rounded.



130. In early to mid-April, forsythias are in bloom. The flowers are golden-yellow, 1 inch across, and bell-shaped. It should be noted that the flower buds are subject to freeze damage in severe winters.

131. ***Hydrangea quercifolia*** (hy-DRAN-jia) - OAKLEAF HYDRANGEA

Oakleaf hydrangea has a mature height of 6 feet with a three- to five-foot spread. It is a moderately fast-growing shrub with a spreading form.



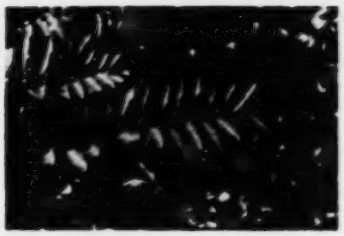
132. The leaves are opposite and 2 to 5 inches long with five to seven lobes. The veins are very prominent. The leaf resembles that of the oak. A milky sap exudes from the leaf petiole when broken.

133. The flowers are 4- to 12-inch-long clusters which bloom in mid-July. They are white, turning purplish.

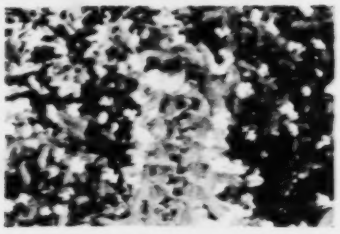
134. The bark is exfoliating and brownish orange.

135. ***Ligustrum obtusifolium*** (ly-GUS-trum) - BORDER PRIVET

Border privets are used as hedges or border plantings. They reach a mature height of 6 to 8 feet with an equal spread. Privets are known for their rapid growth rate.



136. The leaves are opposite, 1 to 2½ inches long, and entire.

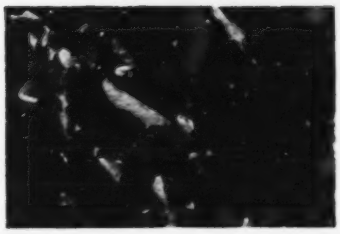


137. The white flowers appear in mid-June to July in clusters 1½ inches long.

138. The fruits are black berries and are quite persistent. They are round — ¼ inch in diameter.

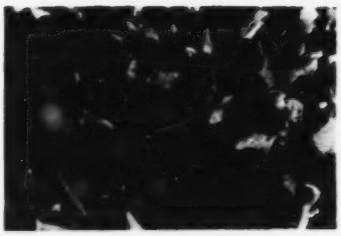
139. ***Magnolia stellata*** (mag-NO-lia) - STAR MAGNOLIA

Star magnolia is a large shrub maturing at a height of 15 to 20 feet with a 10- to 15-foot spread. It is a slow-growing plant with a round compact form.



140. The leaves are alternate, 2 to 4 inches long, and dull green.

141. In mid-April 3-inch flowers with twelve to fifteen petals bloom. They are fragrant, very white, and bruise easily if there is a late spring frost.

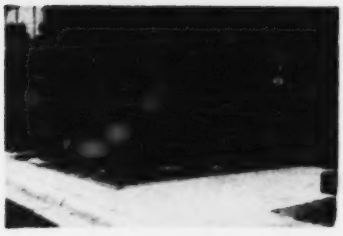


142. The fruit of star magnolia is a green follicle. When mature, its outer covering falls off and bright orange seeds are exposed.

143. ***Myrica pensylvanica*** (mir-RI-ka) - BAYBERRY, CANDLEBERRY

Bayberry is normally a rounded shrub with an ultimate height of 12 feet and a 5- to 10-foot spread. One problem with the bayberry is that it is a semi-evergreen and is often subject to winter injury. Bayberries are also known for their bluish-gray fruit which can be melted down and made into candles.

144. The leaves are alternate, semi-evergreen, and 1½ to 4 inches long with the top quarter of the leaf toothed. The leaves have the characteristic bayberry scent when crushed.



145. ***Rhamnus frangula* 'Columnaris'** (RAM-nus) - TALLHEDGE, GLOSSY COLUMNAR BUCKTHORN

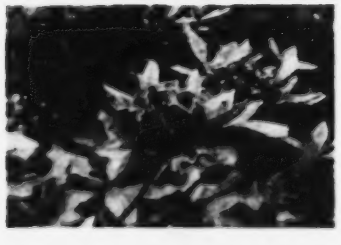
Tallhedge is a columnar shrub with a height of 15 to 20 feet and a 6- to 8-foot spread. Many times it is multi-stemmed.

146. The leaves are alternate, 2½ inches long, with eight or nine pairs of veins. The bottom of the plant is often leafless.

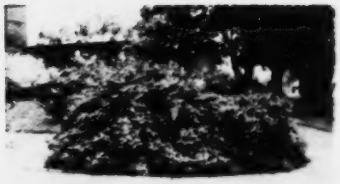
147. ***Rhododendron* X *Kosterianum*** (ro-do-DEN-dron) - MOLLIS HYBRID AZALEA

Mollis hybrid azalea is a shrub with an ultimate height of 5 feet and a 3- to 5-foot spread. It is slow-growing and deciduous, and requires acid soil and some winter protection.

148. The leaves are alternate, 2 to 4 inches long, pubescent and often yellowish in color due to iron deficiency. The flowers are 2 inches across and borne in clusters 4 to 6 inches wide. Flowering time is late May to early June.



149. The flower color can be white, yellow, orange, pink, or red.



150. ***Ribes alpinum*** (RY-beez) - ALPINE CURRANT

This rounded shrub will reach a height of 8 feet with an equal spread. It is slow-growing, will tolerate some shade, and is often used as a hedge.

151. The leaves are alternate, 1 to 2 inches long, three-lobed, and coarsely toothed. They appear very early in the spring.

152. The flowers on Alpine currant are yellowish-green, are borne in clusters 1 to 2 inches long, and bloom in early May.

153. ***Syringa vulgaris*** (si-RING-ga) - COMMON LILAC

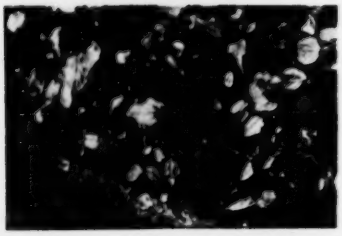
Common lilac is a dense, rounded shrub with an ultimate height of 25 feet and a 15- to 20-foot spread. It is susceptible to a variety of insects and diseases, none of which is severe enough to kill the plant, only to cause cosmetic damage. This lilac is rapid-growing and suckers freely.

154. The leaves are opposite, 2 to 5 inches long, with the base heart-shaped and the tip pointed.

155. There are many common lilac cultivars with possible flower colors of white, blue, pink, or the traditional lilac shown here. Flowers are borne in 5- to 10-inch clusters blooming in mid-May. Each individual flower is only about ¼ inch in diameter.

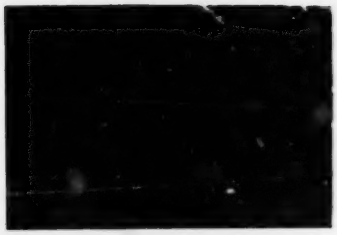
156. ***Viburnum*** X ***burkwoodii*** (vy-BER-num) - BURKWOOD VIBURNUM

Burkwood viburnum is a rapid-growing, rounded shrub with a mature height up to 8 feet and an equal spread. Sometimes it is slow to become established.



157. The leaves are semi-evergreen, opposite, 1 to 4 inches long, irregularly toothed, and glossy green above and pubescent gray below.

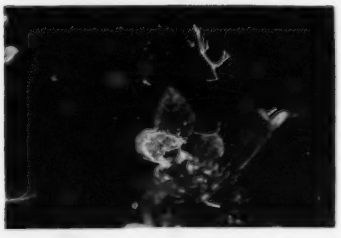
158. The flowers bloom in clusters in late April to early May. These clusters are 2 to 3 inches across, with the individual flower approximately ⅜ inch. The pink color of the bud turns white when the flower is fully expanded.



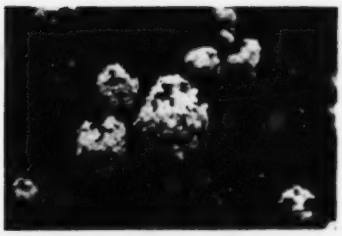
159. The fruit is a berry, ⅜ inch in diameter, and red turning black with maturity.

160. ***Viburnum carlesii*** - KOREAN SPICE VIBURNUM,
FRAGRANT VIBURNUM

This viburnum is one of the smaller of its genus. The ultimate height is 4 to 8 feet with a spread of 6 to 8 feet. It is rounded and usually grafted onto another viburnum rootstock.



161. The dull green, pubescent leaves are opposite, 1 to 4 inches long, and irregularly toothed.

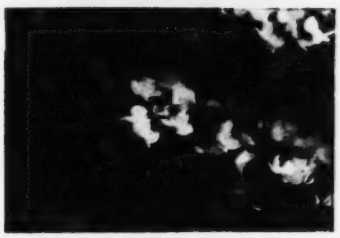


162. The flower clusters, blooming in early May, are pink, turning white, with a 2- to 3-inch diameter.

163. ***Viburnum plicatum tomentosum*** - DOUBLEFILE VIBURNUM

Doublefile viburnum is a rounded shrub with horizontal branches. It reaches a height of 8 feet with an equal spread.

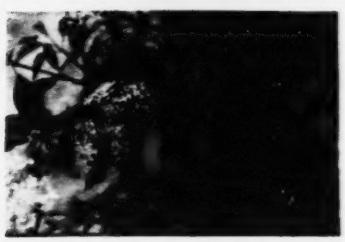
164. The leaves are opposite, 2 to 4 inches long, with very prominent veins.



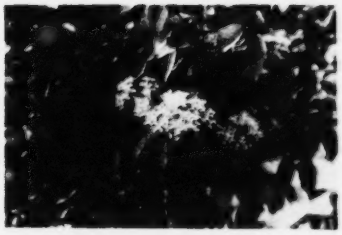
165. The flowers bloom in mid- to late May. They are borne in clusters, with sterile flowers, which are white, ringing the outside of the cluster, and creamy white fertile flowers in the center. The flower clusters are borne in pairs on short branches.

166. ***Viburnum prunifolium*** - BLACK HAW

Black haws are medium to slow-growing, rounded shrubs which mature at a height of 10 to 15 feet with an 8- to 12-foot spread. Black haw grows well in many soils and can be pruned into a small tree.



167. The leaves are bright green, 1½ inches long, and finely toothed like a cherry leaf. The petioles sometimes have narrow wings.

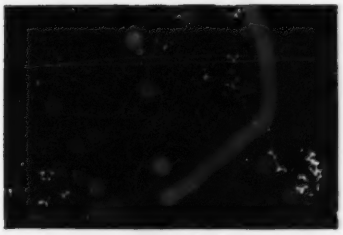


168. The flowers are creamy white, flat, and 2 to 4 inches across. They bloom in mid- to late May.

169. ***Weigela florida*** (wy-GEE-la) - WEIGELA

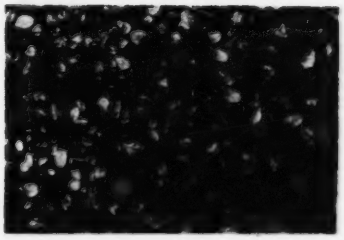
This rapid-growing, upright-to-arching shrub reaches a mature height of 5 to 12 feet with a 5- to 6-foot spread. Weigelas generally never reach their ultimate height because of dieback due to winter injury.

170. The leaves are opposite, 2 to 3 inches long, and finely toothed. They resemble forsythia leaves.



171. Weigela blooms in mid-May to June. Its flowers are bell-shaped, 1 inch long, and pink to red.

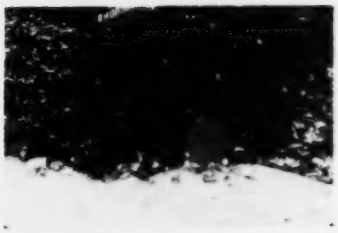
172. **GROUND COVERS**



173. ***Ajuga reptans*** (aj-OO-ga) - AJUGA, CARPET BUGLE, BUGLEWEED

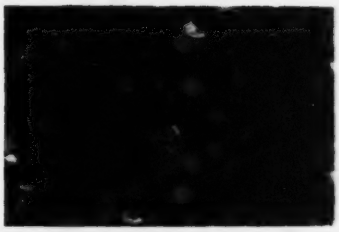
Ajuga is a moderate-growing ground cover with a mature height of 4 to 12 inches. The foliage of ajuga ranges in color from green to purple. This is one of the few broadleaf ground covers that can withstand limited foot traffic.

174. The flowers are clustered on upright stalks. They are usually blue, but can be purple, red, or white. The flowering time is May.

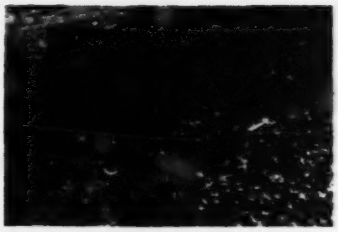


175. ***Euonymus fortunei*** **'Colorata'** (yew-ON-im-us) - PURPLE LEAF WINTERCREEPER

This ground cover is a broadleaf evergreen with an ultimate height of 1 foot and a 3-foot spread. It has the ability to climb if supported.



176. Leaves are opposite, evergreen, 1 to 3 inches long, and toothed. The veins are light in color and very prominent. In the fall the leaves turn dark purple.



177. ***Hedera helix*** (HED-er-a) - ENGLISH IVY

English ivy is a broadleaf evergreen ground cover that matures at a height of 4 inches with a 20-foot spread. If used as a vine, this plant can reach a height of 60 feet.

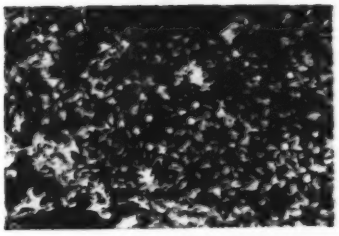
178. Juvenile leaves, which are most common, are 1 to 5 inches long with three to five lobes. The veins are very light and prominent. On mature wood the leaves tend to be entire, not lobed.

179. ***Lonicera japonica*** **'Halliana'** (lon-ISS-er-a) - HALL'S HONEYSUCKLE

Hall's honeysuckle is a rapid-growing ground cover that matures to a height of 2 to 3 feet and has a spread of 12 feet.

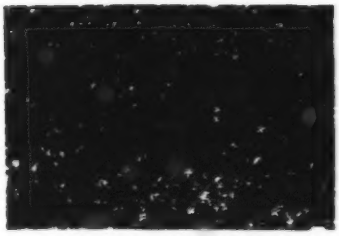
180. The leaves are opposite, semi-evergreen, and 1½ to 3 inches long with the apex pointed.

181. The flowers, white turning yellow, are borne in pairs in May to early June. Often a few flowers are in bloom all summer long.



182. ***Pachysandra terminalis*** (pak-iss-AND-ra) - PACHYSANDRA, JAPANESE SPURGE

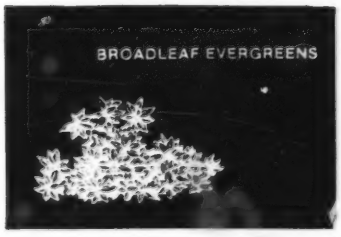
Pachysandra is a broadleaf evergreen ground cover with a mature height of 12 inches. It spreads by underground stems. The leaves are alternate, yellow-green, and toothed on the upper half. White flowers bloom in early May.



183. ***Vinca minor*** (VIN-ka) - MYRTLE, PERIWINKLE

This broadleaf evergreen ground cover matures at 6 to 12 inches and spreads by above-ground stems. It grows in sun or shade but prefers shade.

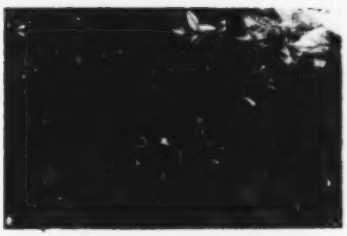
184. The leaves are opposite, 1 to 2 inches long, and glossy green. The solitary flowers are lavender-blue and 1 inch across. They bloom in late April, but it is not unusual to see a flower here and there all summer long.



185. **BROADLEAF EVERGREENS**

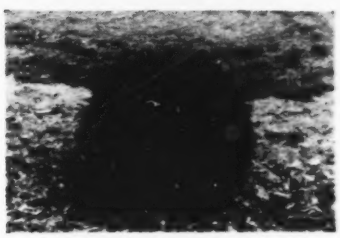
186. ***Abelia*** X ***grandiflora*** (ab-EE-lia) - GLOSSY ABELIA, BRUSH ARBUTUS

Abelia is a small shrub 3 to 5 feet in height, with a spread of 6 to 8 feet. It is rounded-to-spreading, with arching branches, and is hardy only to Zone 6. It does not do well in northern climates.



187. The leaves are opposite, semi-evergreen, 1 to 2 inches long, and finely toothed with the apex pointed.

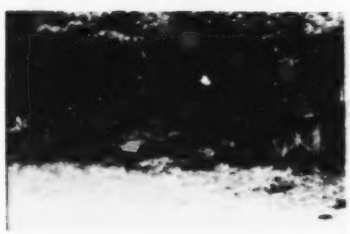
188. The flowers are ¾ inch long and bell-shaped. They are pinkish-white, are borne in clusters, and bloom June through September.



189. ***Buxus sempervirens*** (BUX-us) - COMMON BOXWOOD

This dense, rounded shrub has a mature height of 5 to 15 feet and an equal spread. In northern climates, though, it rarely reaches the greater heights because of its marginal hardiness and slow growth rate. Boxwood needs winter protection.

190. The leaves are opposite, evergreen, 1 inch long, elliptical, shiny green above, and yellow green below. The stems are square.



191. ***Euonymus fortunei*** **'Vegetus'** (yew-ON-im-us) - BIGLEAF WINTERCREEPER

Bigleaf wintercreeper is a broadleaf evergreen that can be used as a single specimen, in a mass planting, or as a climber on open supports. If used as a shrub, as shown here, its mature height will be 4 feet with a spread of 6 feet.

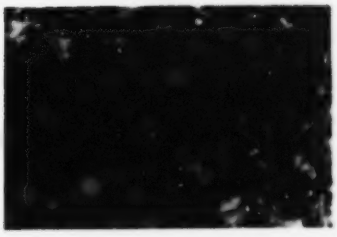
192. If used as a vine, wintercreeper can climb up to 40 feet.

193. The leaves are opposite, 1 inch long, toothed, and leathery.

194. The orange seeds, ⅜ inch across and in groups of four, mature in the fall and are persistent throughout the winter. As this slide shows, without adequate winter protection, the evergreen leaves turn brown and die.

195. ***Ilex aquifolium*** (EYE-lex) - ENGLISH HOLLY

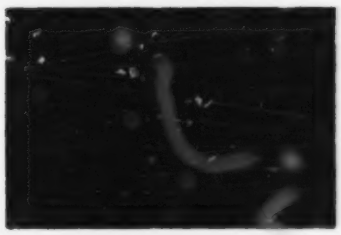
This pyramidal broadleaf evergreen has an ultimate height of 25 feet and a 15-foot spread. It is slow to become established and is hardy only to Zones 6 and 7.



196. The leaves are alternate, 1 to 2 inches long, and toothed with spines. The fruit, also seen here, is a red ¼-inch drupe, which is rounded and persistent. One should note that hollies are dioecious and will fruit only on female plants.

197. ***Ilex crenata*** - JAPANESE HOLLY

This holly is a broadleaf evergreen shrub with a mature height of 4 to 8 feet and a 3- to 6-foot spread. It is slow-growing and rounded.



198. The leaves are alternate, glossy green, ½ to 1½ inches long, and finely toothed.

199. ***Ilex glabra*** - INKBERRY, WINTERBERRY

This slow-growing, oval-to-rounded, broadleaf evergreen has an ultimate height of 5 to 7 feet with an equal spread. As all hollies do, inkberry requires winter protection and acid soil.

200. The leaves are alternate, 1 to 2 inches long, and obovate-to-elliptical with the top half of the leaf toothed.

201. ***Mahonia aquifolium*** (ma-HO-nia) - OREGON GRAPE HOLLY

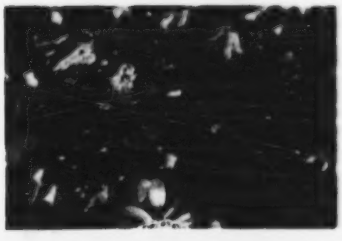
Oregon grape holly is a spreading shrub with a 3- to 5-foot height and an equal spread. The form is round-to-irregular. The plants spread by underground stems.

202. The leaves are alternate, evergreen, and pinnately compound with five to nine leaflets. Each leaf is 6 to 12 inches long. The leaflets are 1 to 3 inches long, toothed with spines, and usually glossy green. One interesting characteristic of Oregon grape holly is the bronze color of the new growth.

203. The flowers, which bloom in early May, are yellow and borne in clusters 2 to 3 inches across.

204. ***Pieris japonica*** (py-EE-ris) - JAPANESE ANDROMEDA, JAPANESE PIERIS

Japanese pieris is an upright 4- to 10-foot broadleaf evergreen shrub that requires acid soil and winter protection.

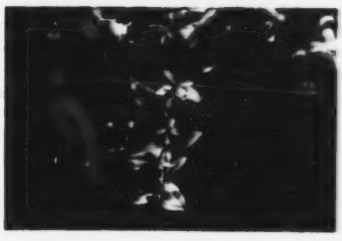


205. The leaves are alternate, 1 to 3 inches long, evergreen, and toothed. The new growth is bronze.

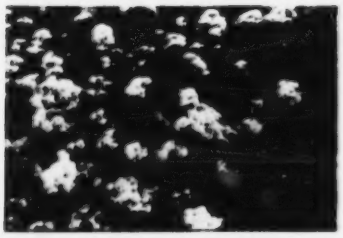
206. The flowers are white, bell-shaped, and borne in pendulous clusters 3 to 6 inches long. They bloom in mid-April. The brown seed capsules, shown here, are quite persistent, often lasting from the previous growing season.

207. ***Pyracantha coccinea*** (py-ra-KAN-tha) - FIRETHORN, PYRACANTHA

Pyracantha is a rounded-to-spreading shrub. Its mature size is 6 feet high with an equal spread. This broadleaf evergreen also requires winter protection.



208. The leaves are alternate, 1 to 2 inches long, and elliptical with fine teeth. Note the thorns, which are ½ to ¾ inch long, on the branches.



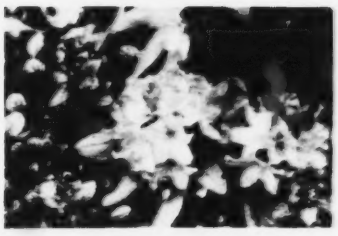
209. In mid-June the flowers appear. They are white, 1 to 2 inches across, and borne in clusters.

210. The fruit, which is quite attractive, is an orange pome ¼ inch in diameter.

211. ***Rhododendron* spp.** (ro-do-DEN-dron) - RHODODENDRON

Rhododendrons are rounded, broadleaf, evergreen shrubs which range in height and spread from 3 to 9 feet. All rhododendrons require acid soil and winter protection.

212. The leaves are alternate, 2 to 5 inches long, and leathery.



213. The flowers are the most striking characteristic of rhododendrons. They are usually in large clusters 2 to 5 inches across with flower colors of white, lavender, pink, or rose.

214. ***Rhododendron* spp. -** BROADLEAF EVERGREEN AZALEA

Most azaleas, which are also in the rhododendron genus, are broadleaf evergreens. They reach 8 feet at maturity with an equal spread.

215. The leaves are alternate, elliptical, 1 to 3 inches long, and either finely toothed or entire.

216. The flowers are usually borne in clusters 2 to 4 inches across. Each flower is approximately 2 inches across and usually five-petaled. Flower color ranges from rose and purple to orange. Flowering time for these azaleas is May to June.

217. As shown here, azalea flowers are often double.

218. ***Yucca filamentosa*** (YUK-ka) - YUCCA, ADAMS NEEDLE

The strap-like leaves of yucca form basal rosettes.

219. The white flowers develop on a 1- to 3-foot stalk and bloom in mid-July. They are 2 to 3 inches across.

220. **NEEDLED EVERGREENS**

221. ***Abies concolor*** (AY-beez) - WHITE FIR, COLORADO FIR

This narrowly pyramidal, needled evergreen has a mature height of 40 to 60 feet with a 30- to 40-foot spread.

222. The needles are evergreen, flat, 1½ to 2½ inches long, with two whitish bands on the underside. When the needles are pulled off, they leave a roundish leaf scar on the branch. The foliage is soft to the touch.

223. ***Juniperus* spp.** (joo-NIP-erus) - JUNIPER

This evergreen genus includes a wide range of sizes and forms. Mature heights can range from 1 to 70 feet with spreads of 5 to 20 feet. The forms can be equally varied, from a pyramidal tree to a spreading shrub or a low-growing ground cover. The plant shown here is *Juniperus chinensis*, a spreading shrub.

224. This juniper is *Juniperus horizontalis*, a low-growing ground cover. The plume-like foliage often turns plum-colored in winter.

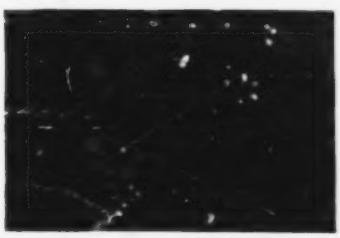
225. *Juniperus virginiana*, eastern red cedar, is considered a pyramidal tree. The handsome reddish bark exfoliates (peels) in long strips. The foliage is medium green in summer but it becomes dirty green in winter.

226. The evergreen foliage of juniper is either needled or scaled. It measures from ⅛ to ½ inch in length.

227. Juniper cones are rounded, ⅛ to ⅜ inch across, and either brown or, as shown here, greenish blue. The greenish blue color is due to a heavy build-up of wax.

228. ***Picea abies*** (PY-see-a) - NORWAY SPRUCE

Norway spruce is a 50- to 70-foot pyramidal tree with pendulous branches. It is rapid-growing and often used in the landscape.



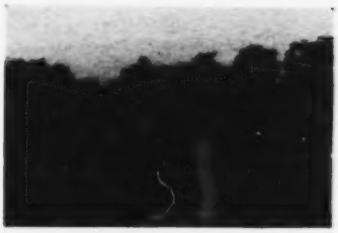
229. The needles are attached to the branch by a woody stalk. They are four-sided and ¾ inch long with the apex pointed.

230. ***Picea pungens*** - COLORADO BLUE SPRUCE, BLUE SPRUCE

This pyramidal evergreen tree reaches an ultimate height of 90 to 120 feet though its growth rate is slow. The branches are horizontal.

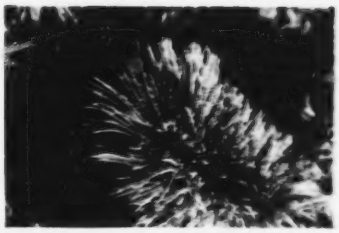
231. The needles are attached to the branch by a woody stem. The needles are four-sided, ¾ to 1¼ inches long, and bluish green to grayish green in color. The apex of each needle is pointed, making the foliage very sharp to the touch.

232. One popular cultivar of this plant is 'Glauca' which has this very blue color.



233. ***Pinus mugo*** (PY-nus) - MUGO PINE

Mugo pine is a large rounded evergreen shrub. It has a mature height of 20 to 35 feet with an equal spread. It is the only species of pine that is a shrub.

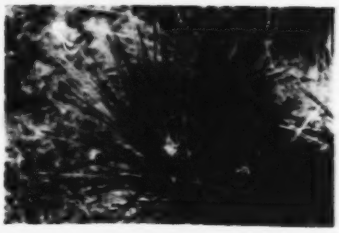


234. The needles of mugo pine grow two per fascicle (bundle). Each needle is 1 to 3 inches long, finely toothed, and twisted.

235. A popular cultivar of mugo pine is 'Compacta.' It has a mature height of 3 to 4 feet.

236. ***Pinus nigra*** - AUSTRIAN PINE

Austrian pine is a 70- to 90-foot tree which is pyramidal when young and spreads with age. It tolerates city conditions and salt spray well, so is an excellent choice where those conditions are present.



237. The needles are two per fascicle, 3 to 7 inches long, and finely toothed. The apex is pointed and sharp to the touch. The bud, which is also a good identifying characteristic, is ½ to 1 inch long, sharply pointed, and sticky due to a coating of sap.

238. The bark, when mature, will be furrowed and have whitish patches as shown here.

239. ***Pinus strobus*** - WHITE PINE, EASTERN WHITE PINE

This open pyramidal evergreen tree reaches ultimate heights of 50 to 80 feet. Its branch arrangement is easy to recognize: a whorl of branches, a space, and then another whorl of branches up the entire length of the tree. White pine has two limiting factors. It needs protection from winter wind and it is attacked by a variety of insects.

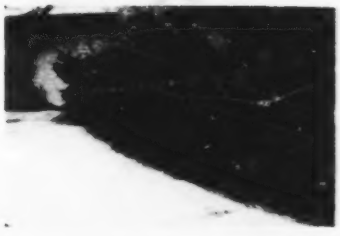
240. The needles are five per fascicle, 4 to 6 inches long, finely toothed, and very flexible.

241. ***Pinus sylvestris*** - SCOTCH PINE, SCOTS PINE

This spreading-to-irregular evergreen tree grows 60 to 75 feet high. Its irregular form can produce some interesting effects; this makes it a good landscape specimen.

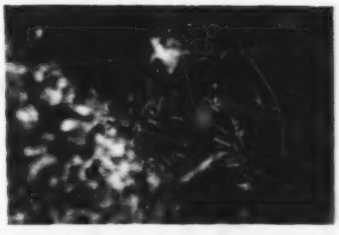
242. The needles are two per fascicle, 1½ to 3 inches long, twisted, and finely toothed.

243. The bark is very characteristic of Scotch pine: exfoliating and reddish-orange.



244. ***Taxus*** X ***media*** (TAX-us) - YEW

The yew is usually a round, evergreen shrub with a mature height of 5 to 20 feet depending on the cultivar. It is probably the most popular landscape plant in use.



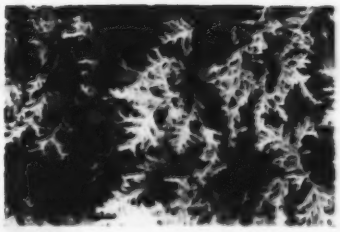
245. The needles are single, ½ to 1¼ inches long, with the apex pointed. The underside of the needle has two yellow bands.

246. The fruit is a ¼-inch aril (berry).

247. One of the popular female cultivars is 'Hicksii' which has a columnar form. It is often used as a hedge planting.

248. ***Thuja occidentalis*** (THU-ya) - AMERICAN ARBORVITAE, WHITE CEDAR

This 20- to 40-foot evergreen tree can be either narrowly columnar or pyramidal. It is most often used as a hedge or corner planting.



249. The foliage is scale-like. Each scale is approximately ⅛ inch with tiny glands present above.

250. The fruit is a brown cone ½ inch long.

251. ***Tsuga canadensis*** (TSOO-ga) - CANADIAN HEMLOCK, COMMON HEMLOCK

Canadian hemlock has a mature height of 60 to 80 feet and a 25- to 35-foot spread. It is pyramidal with drooping branches and does best where ample moisture is available.

252. The needles are alternate, ½ inch long, flattened, and green on top with two white bands on the underside.

253. A popular cultivar of Canadian hemlock is 'Pendula' which has this interesting weeping form.

REFERENCES

Bailey, Liberty Hyde, and Ethel Bailey (revised by the staff of the Liberty Hyde Bailey Hortorium). *Hortus Third*. New York, New York: Macmillan Publishing Company, Inc., 1976.

Robinson, Florence B. *Useful Trees and Shrubs*. Champaign, Illinois: Garrard Publishing Company, 1960.

Spangler, Ronald, and Jerry Ripperda. *Landscape Plants*. East Lansing, Michigan: Michigan State University Press, 1975.

Spangler, Ronald, and Jerry Ripperda. *Landscape Plants for the Central and Northeastern United States*. Minneapolis, Minnesota: Burgess Publishing Company, 1977.

Wyman, Donald. *Wyman's Gardening Encyclopedia*. New York, New York: Macmillan Publishing Company, Inc., 1977.

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